

What is Claimed is:

1. A fuel cell comprising:  
electrolyte;  
an anode and a cathode at opposite sides of the electrolyte;  
5 an anode side separator and a cathode side separator at outer sides of the  
anode and the cathode, respectively; and  
a medium layer between the cathode and the cathode side separator for  
prevention of corrosion of the cathode side separator.
- 10 2. The fuel cell as claimed in claim 1, wherein the medium layer is a coated  
layer on the cathode.
3. The fuel cell as claimed in claim 2, wherein the coated layer is formed of a  
material selected from materials having ionization tendencies similar to the cathode.
- 15 4. The fuel cell as claimed in claim 2 or 3, wherein the cathode includes a Pt  
catalyst, and the medium layer is formed of gold.
5. The fuel cell as claimed in claim 1 or 2, further comprising a medium layer  
20 between the anode and the anode side separator for prevention of corrosion of the  
anode side separator.
6. A fuel cell comprising:  
electrolyte;  
25 an anode and a cathode at opposite sides of the electrolyte;

an anode side separator at an outer side of the anode;

a cathode side separator at an outer side of the cathode;

a porous supporting member between the cathode and the cathode side separator for supporting the cathode; and

5 a supporting member medium layer between the cathode and the porous supporting member for prevention of corrosion of the porous supporting member.

7. The fuel cell as claimed in claim 6, wherein the supporting member medium layer is a coated layer on the supporting member.

10

8. The fuel cell as claimed in claim 7, wherein the coated layer is formed of a material selected from materials having ionization tendencies similar to the cathode.

9. The fuel cell as claimed in claim 6, further comprising a medium layer  
15 between the cathode side separator and the porous supporting member for prevention of corrosion of the cathode side separator.

10. The fuel cell as claimed in one of claims 6 ~ 9, wherein the cathode includes a Pt catalyst, and the medium layer is formed of gold.

20

11. The fuel cell as claimed in one of claims 6 ~ 9, further comprising:

a porous supporting member between the anode and the anode side separator for supporting the anode; and

a supporting member medium layer between the anode and the porous  
25 supporting member for prevention of corrosion of the porous supporting member.

12. A fuel cell comprising:

electrolyte;

an anode and a cathode at opposite sides of the electrolyte;

5        an anode side separator and a cathode side separator at outer sides of the  
anode and the cathode, respectively; and

      a medium layer between the anode and the anode side separator for  
prevention of corrosion of the anode side separator.